



Economic Regulation Authority

Access Arrangement Information for the Mid-West and South-West Gas Distribution System

8 November 2024

Acknowledgement of Country

At the ERA we value our cultural diversity and respect the traditional custodians of the land and waters on which we live and work.

We acknowledge their continuing connection to culture and community, their traditions and stories. We commit to listening, continuously improving our performance and building a brighter future together.

Economic Regulation Authority

Level 4, Albert Facey House

469 Wellington Street, Perth WA 6000

Telephone 08 6557 7900

Email info@erawa.com.au

Website www.erawa.com.au

This document can also be made available in alternative formats on request.

National Relay Service TTY: 13 36 77

© 2024 Economic Regulation Authority. All rights reserved. This material may be reproduced in whole or in part provided the source is acknowledged

Contents

Access Arrangement Information	1
Overview	1
Interpretation.....	1
Structure and compliance.....	2
Financial information	4
Forecasts and estimates	4
Expenditure and Pipeline Usage – NGR 72(1)(a)	5
Opening Capital Base – NGR 72(1)(b).....	7
Conforming capital expenditure.....	7
Amounts added under rules 82, 84 and 86	7
Depreciation.....	7
Redundant and disposed assets	7
Opening capital base	8
Projected Capital Base – NGR 72(1)(c)	9
Forecast conforming capital expenditure (NGR 72(1)(c)(i))	9
Forecast of depreciation (NGR 72(1)(c)(ii)).....	10
Forecast Demand – NGR 72(1)(d).....	13
Forecast Operating Expenditure – NGR 72(1)(e)	15
Rate of Return – NGR 72(1)(g)	16
Estimated Cost of Income Tax – NGR 72(1)(h).....	17
Taxable income	17
Tax asset lives	17
Tax depreciation method	18
Tax asset base	18
Statutory income tax rate.....	19
Imputation credits	19
Efficiency Gains and/or Losses – NGR 72(1)(i).....	20
Approach to Setting Tariffs – NGR 72(1)(j).....	21
Tariff classes.....	21
Charging parameters.....	23
Reference tariffs and costs.....	24
Stand-alone and incremental tariff considerations	26
Reference Tariff Variation Mechanism – NGR 72(1)(k).....	27
Tariff variation by formula	27
Tariff variation by cost pass through	27
Proposed Incentive Mechanism – NGR 72(1)(l)	28
Total Revenue – NGR 72(1)(m)	29

Working capital 29
Allocation of total revenue 30

List of appendices

Appendix 1 List of Tables..... 32
Appendix 2 Abbreviations..... 33

Access Arrangement Information

Overview

This document comprises the Access Arrangement Information (AAI) for the revised access arrangement for the Mid-West and South-West Gas Distribution Systems (GDS) that was proposed by the ERA and given effect on 8 November 2024, pursuant to rule 64(4) of the National Gas Rules (NGR).¹

The purpose of this document is to:

1. Set out the information necessary for users and prospective users to understand the background to the access arrangement for the GDS and
2. Enable users and prospective users to understand the derivation of the elements of the access arrangement for the GDS for the sixth access arrangement period (AA6) – 1 January 2025 to 31 December 2029.

The provision of AAI is also necessary for compliance with the NGR.

The GDS consists of gas reticulation networks servicing Geraldton, Bunbury, Busselton, Harvey, Pinjarra, Brunswick Junction, Capel and the Perth greater metropolitan area (including Mandurah). These combined networks supply approximately 785,000 customers through more than 14,500 kilometres of pipeline.

ATCO Gas Australia (ATCO) owns and operates the GDS. ATCO is the natural gas distribution business within the Pipelines and Liquids Global Business Unit of the ATCO Group of global companies. The ATCO Group is engaged in structures and logistics, electricity (generation, transmission and distribution), pipelines and liquids (natural gas transmission, distribution and infrastructure development, energy storage and industrial water solutions) and retail energy.

Interpretation

Unless the contrary intention is expressed, words or phrases in this document have the same meaning as those defined in Part 13 (Definitions and Interpretation) of the revised access arrangement for the GDS.

A reference in this document to:

- “access arrangement period” means the sixth access arrangement period or AA6 (1 January 2025 to 31 December 2029).
- “earlier access arrangement period” or “previous access arrangement period” means the fifth access arrangement period or AA5 (1 January 2020 to 31 December 2024), which preceded the access arrangement period.

¹ Economic Regulation Authority, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2025 to 2029*, 8 November 2024.

Where a word or phrase has not been defined in this document then, unless the contrary intention is expressed, the word or phrase is to be given the meaning prescribed in the National Gas Law, Rules or Regulations (as relevant and applicable in Western Australia).^{2, 3}

Structure and compliance

This document follows the structure of rule 72 of the NGR, which sets out specific requirements for AAI relevant to revenue and price regulation (Table 1).

Table 1: Requirements for access arrangement information relevant to price and revenue regulation

National Gas Rule	Requirement for Access Arrangement Information (AAI)	AAI Table Reference
72(1)(a)	<p>[Expenditure and pipeline usage]</p> <p>If the access arrangement period commences at the end of an earlier access arrangement, AAI must include:</p> <ul style="list-style-type: none"> • Capital expenditure (by asset class) and operating expenditure (by category) over the earlier access arrangement period. • Usage of the pipeline over the earlier access arrangement period showing: <ul style="list-style-type: none"> – For a distribution pipeline: minimum, maximum and average demand and customer numbers in total and by tariff class. – For a transmission pipeline: minimum, maximum and average demand for each receipt or delivery point and user numbers for each receipt or delivery point. 	<p>Table 3</p> <p>Table 4</p> <p>Table 5</p> <p>Table 6</p>
72(1)(b)	<p>[Opening capital base]</p> <p>AAI must include information on how the capital base is arrived at, and if the access arrangement period commences at the end of an earlier access arrangement, a demonstration of how the capital base increased or diminished over the previous period.</p>	<p>Table 7</p>
72(1)(c)	<p>[Projected capital base]</p> <p>AAI must include the projected capital base over the access arrangement period, including:</p> <ul style="list-style-type: none"> • A forecast of conforming capital expenditure for the period and the basis for the forecast. • A forecast of depreciation for the period, including a demonstration of how the forecast is derived on the basis of the proposed depreciation method. 	<p>Table 8</p>

² The current rules that apply in Western Australia are available from the Australian Energy Market Commission: AEMC, 'National Gas Rules (Western Australia)' ([online](#)) (accessed November 2024). At the time of publication, *National Gas Rules – Western Australia version 12 (1 February 2024)* was in effect.

³ The NGL as implemented in Western Australia is set out as a note in the *National Gas Access (WA) Act 2009*. See: Western Australian Legislation ([online](#)) (accessed November 2024). At the time of publication, *National Gas Access (WA) Act 2009, 25 January 2024* was in effect.

National Gas Rule	Requirement for Access Arrangement Information (AAI)	AAI Table Reference
72(1)(d)	<p>[Forecast demand]</p> <p>To the extent it is practicable to forecast capacity and utilisation over the access arrangement period, AAI must include a forecast of pipeline capacity and utilisation of pipeline capacity over the period and the basis on which the forecast has been derived.</p>	Table 12 Table 13
72(1)(e)	<p>[Forecast operating expenditure]</p> <p>AAI must include a forecast of operating expenditure over the access arrangement period and the basis on which the forecast has been derived.</p>	Table 14
72(1)(f)	<p>[Deleted]</p> <p><i>Note: Rule 72(1)(f) was deleted from the NGR in 2019.</i></p>	N/A
72(1)(g)	<p>[Rate of return]</p> <p>AAI must include the allowed rate of return for each regulatory year of the access arrangement period.</p>	Table 15
72(1)(h)	<p>[Estimated cost of income tax]</p> <p>AAI must include the estimated cost of corporate income tax, calculated in accordance with rule 87A, including the allowed imputation credits referred to in that rule.</p>	Table 16
72(1)(i)	<p>[Efficiency gains and/or losses]</p> <p>If an incentive mechanism operated in the previous access arrangement period, the AAI must include the proposed carry over of increments or decrements for efficiency gains or losses, and a demonstration of how an allowance is to be made for any such increments or decrements.</p>	N/A
72(1)(j)	<p>[Approach to setting tariffs]</p> <p>AAI must include the proposed approach to setting tariffs including:</p> <ul style="list-style-type: none"> • The suggested basis of reference tariffs, including the method used to allocate costs and a demonstration of the relationship between costs and tariffs. • A description of any pricing principles employed, but not otherwise disclosed. 	Table 19 Table 20 Table 21 Table 22 Table 23 Table 24
72(1)(k)	<p>[Reference tariff variation mechanism]</p> <p>AAI must include the service provider's rationale for any proposed reference tariff variation mechanism.</p>	(refer p.27)
72(1)(l)	<p>[Proposed incentive mechanism]</p> <p>AAI must include the service provider's rational for any proposed incentive mechanism.</p>	(refer p.28)
72(1)(m)	<p>[Total revenue]</p> <p>AAI must include the total revenue to be derived from pipeline services for each regulatory year of the access arrangement period.</p>	Table 25 Table 26 Table 27

Financial information

Rule 73 of the NGR specifies the basis on which financial information is to be provided.

Financial information in this document is provided on both a nominal and real basis. All real financial information is expressed in constant prices as at 31 December 2023.

Where necessary, to express financial values in dollar values of 31 December 2023, financial values prior to this date were escalated at the rate of inflation as measured by the *Consumer Price Index (All Groups, Weighted Average of Eight Capital Cities)* as published by the Australian Bureau of Statistics.

Financial values after 31 December 2023 are de-escalated using the forecast rate of inflation from the weighted average cost of capital (WACC) parameter estimates shown in Table 15.

Table 2 shows actual consumer price index and forecast inflation values used to provide financial information in this document.

Table 2: Actual and forecast consumer price index and inflation rates

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	ACTUAL					FORECAST					
December CPI	116.2	117.2	121.3	130.8	136.1						
Inflation (%)	1.84	0.86	3.50	7.83	4.05	2.24	2.24	2.24	2.24	2.24	2.24

Source: ERA, Final Decision GDS Tariff Model, November 2024.

Forecasts and estimates

Rule 74 of the NGR contains specific requirements for the provision of forecasts and estimates.

Expenditure and Pipeline Usage – NGR 72(1)(a)

**Table 3: Capital expenditure by asset class for AA5
(\$ million real as at 31 December 2023)**

Asset class	2020	2021	2022	2023	2024 (forecast)	Total
High pressure mains – steel	4.4	4.7	4.7	1.7	2.9	18.4
High pressure mains – polyethylene (PE)	0.7	(0.2)	-	-	-	0.5
Medium and low pressure mains	31.4	37.4	38.9	37.2	35.2	180.1
Regulators	1.6	1.2	1.7	1.6	1.9	8.0
Secondary gate stations	0.1	-	-	0.2	0.2	0.5
Buildings	0.4	0.3	0.4	0.7	0.3	2.1
Meter and services pipes	24.9	27.5	27.4	29.9	27.6	137.3
Equipment and vehicles	1.1	0.8	0.9	0.6	1.2	4.6
Vehicles	3.3	2.6	1.6	1.5	3.0	12.0
Information technology (including telemetry)	3.7	9.2	8.5	8.1	5.9	35.4
Land	-	-	-	-	-	-
Equity raising costs	-	-	-	-	-	-
Total	71.5	83.6	84.1	81.5	78.1	398.8

Source: ERA, Final Decision Attachment 4, GDS Tariff Model, November 2024.

**Table 4: Operating expenditure by category for AA5
(\$ million real as at 31 December 2023)**

Category	2020	2021	2022	2023	2024 (forecast)	Total
Network	32.0	35.3	36.1	40.5	41.1	185.1
Corporate	20.0	26.9	29.3	27.7	23.6	127.5
Information technology	7.8	8.8	4.7	5.6	6.7	33.7
Unaccounted for gas	2.7	3.8	3.3	3.0	4.3	17.1
Ancillary services	1.6	0.9	0.9	2.0	3.1	8.4
Total	64.1	75.7	74.4	78.9	78.8	371.9

Source: ATCO, ATCO GAS 2025-29 Revised Plan, Table 14.3, June 2024..

Table 5: Minimum, maximum and average demand for AA5 (TJ / day)

Demand	2020	2021	2022	2023	2024 (forecast)
Average	74	78	76	78	82
Minimum	44	38	37	35	40
Maximum	112	126	118	125	119

Source: ATCO, ATCO GAS 2025-29 Revised Plan, June 2024.

Table 6: Average customer numbers by tariff class for AA5 (average for year)

Tariff Class	2020	2021	2022	2023	2024 (forecast)
A1	70	70	72	71	68
A2	105	103	104	104	105
B1	1,808	1,877	1,940	1,995	2,046
B2	12,129	12,228	12,428	12,633	12,819
B3	744,038	751,397	761,658	772,819	781,628

Source: ERA, Final Decision Attachment 2, November 2024.

Opening Capital Base – NGR 72(1)(b)

The opening capital base for the access arrangement period (that is, the capital base at 1 January 2025) is determined in accordance with the formula in rule 77(2) of the NGR.

The NGR define *conforming capital expenditure* as “capital expenditure that complies with the new capital expenditure criteria”, with rule 79 of the NGR setting out the criteria.

Conforming capital expenditure

Conforming capital expenditure was assessed using the following framework:

- Determine whether the expenditure satisfies the prudent service provider criteria set out in rule 79(1) of the NGR. That is, the expenditure would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.
- Determine whether the expenditure is justifiable on one or more of the grounds set out in rule 79(2) of the NGR.
- Assess whether forecasts or estimates comply with rule 74(2) of the NGR, which requires a forecast or estimate to be arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances.

Conforming capital expenditure made during the earlier access arrangement period is shown in Table 7 (below).

Amounts added under rules 82, 84 and 86

Rules 82, 84 and 86 of the NGR cover provisions for capital contributions by users to new capital expenditure, the speculative capital expenditure account and the re-use of redundant assets.

There were no amounts added to the opening capital base under rules 82, 84 or 86.

Depreciation

The depreciation method used for calculating the depreciation on the regulatory asset base over the earlier access arrangement period was a straight-line depreciation method (or otherwise a current cost accounting approach). This approach is consistent with the depreciation criteria set out in rule 89 of the NGR.

Redundant and disposed assets

There were no redundant assets identified during the earlier access arrangement period.

The value of pipeline assets disposed of during the earlier access arrangement period was \$2.0 million (real as at 31 December 2023).

Opening capital base

The opening capital base at 1 January 2025 is \$1,581.6 million (Table 7).

Table 7: Opening capital base at 1 January 2025 (\$ million real as at 31 December 2023)

	2020	2021	2022	2023	2024 (forecast)
Opening capital base	1,509.7	1,526.5	1,544.8	1,561.9	1,575.1
Plus: Capital expenditure	71.5	83.6	84.1	81.5	78.1
Less: Depreciation	54.0	64.8	66.5	68.0	70.7
Less: Asset disposals	0.7	0.6	0.4	0.3	-
Closing capital base	1,526.5	1,544.8	1,561.9	1,575.1	1,582.5

Some numbers may not add due to rounding

Source: ERA, Final Decision Attachment 4, GDS Tariff Model, November 2024.

Projected Capital Base – NGR 72(1)(c)

The projected capital base for the access arrangement period is determined in accordance with the formula in rule 78 of the NGR.

The return on the projected capital base for each year of the access arrangement period is determined in accordance with the formula in rule 87 of the NGR.

No pipeline assets of material value are expected to be disposed of during the access arrangement period.

The projected capital base for the access arrangement period is shown in Table 8.

Table 8: Projected capital base for AA6 (\$ million nominal)

	2025	2026	2027	2028	2029
Opening capital base (start of period)	1,617.9	1,689.7	1,764.5	1,819.8	1,870.3
Inflation	36.2	37.8	39.5	40.8	41.9
Opening capital base (end of period)	1,654.2	1,727.5	1,804.0	1,860.5	1,912.2
Plus: Capital expenditure	106.5	122.6	108.7	106.1	106.7
Less: Depreciation	63.0	77.4	84.6	87.9	90.2
Less: Accelerated depreciation and asset disposals	8.0	8.1	8.3	8.5	8.7
Closing capital base	1,689.7	1,764.5	1,819.8	1,870.3	1,920.1

Source: ERA, Final Decision Attachment 4, GDS Tariff Model, November 2024.

Forecast conforming capital expenditure (NGR 72(1)(c)(i))

The NGR defines conforming capital expenditure as “capital expenditure that complies with the new capital expenditure criteria”. Rule 79 of the NGR sets out the criteria.

Forecast conforming capital expenditure for the access arrangement period was assessed using the following framework.

- Determine whether the expenditure satisfies the prudent service provider criteria set out in rule 79(1) of the NGR. That is, the expenditure would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.
- Determine whether the expenditure is justifiable on one or more of the grounds set out in rule 79(2) of the NGR.
- Assess whether forecasts or estimates comply with rule 74(2) of the NGR, which requires a forecast or estimate to be arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances.

Table 9 shows the forecast conforming capital expenditure for the access arrangement period by asset class.

**Table 9: Capital expenditure by asset class for AA6
(\$ million real as at 31 December 2023)**

Asset class	2025	2026	2027	2028	2029	Total
High pressure mains – steel	4.4	4.7	4.7	1.7	2.9	18.4
High pressure mains – polyethylene (PE)	0.7	(0.2)	0.0	-	-	0.5
Medium and low pressure mains	31.4	37.4	38.9	37.2	35.2	180.1
Regulators	1.6	1.2	1.7	1.6	1.9	8.0
Secondary gate stations	0.1	-	0.0	0.2	0.2	0.5
Buildings	0.4	0.3	0.4	0.7	0.3	2.0
Meter and services pipes	24.9	27.5	27.4	29.9	27.6	137.4
Equipment and vehicles	1.1	0.8	0.9	0.6	1.2	4.6
Vehicles	3.3	2.6	1.6	1.5	3.0	11.9
Information technology	2.8	8.2	7.6	7.3	5.4	31.3
Telemetry	0.8	1.1	0.9	0.7	0.5	4.0
Land	-	-	-	-	-	-
Equity raising costs	-	-	-	-	-	-
Total	71.5	83.6	84.1	81.5	78.1	398.8

Source: ERA, Final Decision Attachment 4, GDS Tariff Model, November 2024.

Forecast of depreciation (NGR 72(1)(c)(ii))

Rule 88 of the NGR sets out the requirements for the depreciation schedule.

Rules 89 and 90 of the NGR set out the depreciation criteria and requirements for the calculation of depreciation for establishing the opening capital base for the next access arrangement period.

A current cost accounting approach (that is, a straight-line depreciation method) is used to calculate the depreciation on the regulatory asset base for the access arrangement period. The approach is consistent with the criteria under rule 89(1) of the NGR.

Table 10 (below) shows the forecast of depreciation for the access arrangement period.

The asset lives used to calculate the forecast are shown in Table 11 (on page 12).

Table 10: Forecast of depreciation for AA6 (\$ million real as at 31 December 2023)

Asset categories	2025	2026	2027	2028	2029	Total
High pressure mains – steel	4.3	4.4	4.4	4.5	4.5	22.1
High pressure mains – polyethylene (PE)	(0.1)	0.1	0.1	0.1	0.1	0.2
Medium pressure mains	7.0	7.0	7.0	7.0	7.0	35.0
Medium/low pressure mains	14.6	15.3	15.9	16.6	17.3	79.8
Low pressure mains	1.7	1.7	1.7	1.7	1.7	8.4
Regulators	1.6	1.6	1.0	1.0	1.1	6.3
Secondary gate stations	(1.3)	0.2	0.2	0.2	0.2	(0.6)
Buildings	0.9	1.0	1.1	1.1	1.1	5.2
Meter and services pipes	28.7	29.1	29.8	30.0	30.3	147.9
Equipment and vehicles	1.0	1.0	1.0	1.0	0.9	5.0
Vehicle	1.5	1.9	1.8	1.8	1.8	8.7
Information technology	(0.2)	8.6	12.5	12.6	11.9	45.4
Telemetry and monitoring	0.5	0.6	0.9	1.1	1.2	4.4
Land						-
Equity raising cost	0.0	0.0	0.0	0.0	0.0	0.1
Total	60.3	72.5	77.4	78.6	79.0	367.8

Source: ERA, Final Decision Attachment 6, GDS Tariff Model, November 2024.

Table 11: AA6 asset lives

Asset categories	Asset life
High pressure mains – steel	80.0
High pressure mains – polyethylene (PE)	60.0
Medium and low pressure mains	60.0
Regulators	40.0
Secondary gate stations	40.0
Buildings	40.0
Meter and services pipes	25.0
Plant and equipment	10.0
Vehicles	10.0
Information technology	5.0
Land	-
Telemetry	10.0
Equity raising cost	53.7
<i>Historical asset categories - no longer used for new capex</i>	
<i>Medium pressure mains</i>	<i>60.0</i>
<i>Low pressure mains</i>	<i>60.0</i>
<i>Full retail contestability (historical IT costs)</i>	<i>5.0</i>

Source: ERA, Final Decision Attachment 6, GDS Tariff Model, November 2024.

Forecast Demand – NGR 72(1)(d)

It is not practicable to forecast pipeline capacity and utilisation of pipeline capacity for a gas distribution network because such networks consist of various sized interlinked pipelines, each with different pipeline capacities. For this reason, demand forecasts are limited to:

- For haulage reference services – customer numbers and gas consumption (or usage) over the access arrangement period (Table 12).
- For ancillary reference services – the number of services provided over the access arrangement period (Table 13).

Table 12: Demand forecast for haulage reference services for AA6

Tariff Class	2025	2026	2027	2028	2029
A1					
Average customer base	68	68	69	68	68
Demand (TJ)	12,320	13,697	14,278	14,358	14,388
A2					
Average customer base	104	104	105	105	104
Demand (TJ)	1,971	1,973	1,992	1,999	2,007
B1					
Average customer base	2,101	2,152	2,205	2,259	2,311
Demand (TJ)	2,242	2,262	2,283	2,301	2,319
B2					
Average customer base	13,001	13,201	13,424	13,647	13,862
Demand (TJ)	1,345	1,356	1,369	1,379	1,390
B3					
Average customer base	797,646	809,503	822,151	835,739	850,354
Demand (TJ)	10,239	10,231	10,240	10,271	10,311
Total					
Average customer base	812,920	825,028	837,954	851,818	866,699
Demand (TJ)	28,117	29,519	30,162	30,308	30,415

Source: ERA, Final Decision Attachment 2, GDS Tariff Model, December 2024.

Note: Average customer base is the average of the opening customer base at the beginning of the year and the closing customer base at the end of the year as per the ERA tariff model.

Table 13: Demand forecast for ancillary reference services for AA6

Ancillary service	2025	2026	2027	2028	2029
Applying a meter lock	9,834	9,980	10,136	10,303	10,484
Removing a meter lock	8,090	8,210	8,338	8,476	8,624
Deregistering a delivery point	3,189	3,236	3,287	3,341	3,399
Disconnecting a delivery point	3,413	3,464	3,518	3,576	3,639
Reconnecting a delivery point	2,702	2,742	2,785	2,831	2,880
Permanent disconnection	1,851	1,878	1,908	1,939	1,973
Special meter reading	107,132	108,724	110,423	112,248	114,211

Source: ERA, Final Decision Attachment 2, GDS Tariff Model, December 2024.

Forecast Operating Expenditure – NGR 72(1)(e)

Rule 91 of the NGR sets out criteria governing operating expenditure.

Table 14 shows the forecast operating expenditure over the access arrangement period. The forecast was derived on the following basis.

- Estimates for the network, corporate and IT operating expenditure categories derived using the base-step-trend method. Under this method, operating expenditure forecasts for these cost categories were based on costs incurred in an efficient base year plus adjustments to account for unanticipated differences between the base year and the AA6 years.
- Specific yearly forecasts for unaccounted for gas and ancillary services. Specific forecasts were calculated for these cost categories because ATCO considered that the expenditure profiles for these categories' over AA6 were not suitably captured by the method of growth in the base-step-trend method.

Table 14: Forecast operating expenditure for AA6 by category (\$ million real as at 31 December 2023)

Category	2025	2026	2027	2028	2029	Total
Base network, corporate and IT operating expenditure	65.3	65.3	65.3	65.3	65.3	326.6
Step changes	2.0	4.1	5.3	8.3	6.7	26.4
Output growth escalation	1.5	2.2	2.9	3.7	4.6	14.9
Input growth escalation	0.5	0.8	1.0	1.3	1.6	5.2
Unaccounted for gas	5.9	6.1	6.1	6.1	6.1	30.3
Ancillary services	4.9	5.0	5.0	5.1	5.2	25.2
Total	80.1	83.4	85.8	89.9	89.5	428.6

Source: ERA, Final Decision Attachment 5, Opex Model, November 2024.

Rate of Return – NGR 72(1)(g)

The rate of return, based on the Weighted Average Cost of Capital (WACC), provides for a return on the regulatory asset base.

The allowed rate of return is determined in accordance with the gas rate of return guidelines, which became a binding instrument in Western Australia in September 2023.⁴

Table 15 shows the rate of return parameters for AA6.

Table 15: Rate of return parameters for AA6

Parameter	Value
Return on debt	
5-year interest rate swap (effective yield)	3.759
Debt risk premium (10-year average)	1.941
Debt issuing cost (0.100%) + hedging (0.114%)	0.288
Nominal return on debt (%)	5.988
Return on equity	
Nominal risk free rate (%)	3.96
Market Risk Premium (%)	6.1
Equity beta	0.7
Nominal return on equity (%)	8.23
Other parameters	
Debt proportion (%)	55
Inflation rate (%)	2.24
Corporate tax rate (%)	30
Franking credit	50
Nominal after-tax WACC (%)	6.99
Real after-tax WACC (%)	4.65

Source: ERA, Final Decision Attachment 7, GDS Tariff Model, November 2024.

⁴ Economic Regulation Authority, 2022 Final Rate of Return Guidelines, 12 September 2023.

Estimated Cost of Income Tax – NGR 72(1)(h)

AAI must include the estimated cost of corporate income tax, calculated in accordance with rule 87A of the NGR, including the allowed imputation credits referred to in that rule.

Table 16 shows the estimated cost of corporate income tax for the access arrangement period.

Table 16: Estimated cost of corporate income tax for AA6 (\$ million nominal)

	2025	2026	2027	2028	2029
Estimated taxable income	31.8	43.1	44.8	46.1	47.9
Estimated income tax payable	9.5	12.9	13.4	13.8	14.4
Value of imputation credits	(4.8)	(6.5)	(6.7)	(6.9)	(7.2)
Estimated cost of corporate income tax	4.8	6.5	6.7	6.9	7.2

Source: ERA, Final Decision Attachment 7, GDS Tariff Model, November 2024.

Taxable income

Taxable income is estimated using the following method:

Smoothed tariff revenue:

plus revenue from prudent discounts

plus ancillary service revenue

minus approved forecast operating expenditure

minus depreciation of the tax asset base, which excludes capital contributions

minus debt servicing costs⁵

equals estimated taxable income.

Tax asset lives

The tax asset categories and respective tax lives for the access arrangement period are shown in Table 17 (below).

⁵ Debt serving costs were calculated by multiplying the debt portion of the opening regulatory asset base by the debt to equity ratio (assumed at 55 per cent). The nominal cost of debt was based on the rate of return.

Table 17: Tax asset categories and tax lives for AA6

Asset category	Tax life
High pressure mains – steel	20
High pressure mains – polyethylene (PE)	20
Medium and low pressure mains	20
Regulators	20
Secondary gate stations	20
Buildings	40
Meters and service pipes to 31 December 2007	25
Meters and service pipes from 1 January 2008	15
Equipment	10
Vehicles	10
Information technology	5
Telemetry	10
Land	0
Equity raising cost	5

Source: ERA, Final Decision Attachment 7, GDS Tariff Model, November 2024.

Tax depreciation method

Depreciation of the tax asset base is calculated using a straight-line method for assets.

Tax asset base

The forecast tax asset base for the access arrangement period is shown in Table 18 (below) and is determined using the following (roll forward) method:

Opening value at 1 January 2025:

- plus** forecast capital expenditure (net of capital contributions) incurred in AA6
- less** depreciation based on the forecast of capital expenditure
- less** any forecast asset disposals during AA6.

No asset disposals are forecast for the access arrangement period.

Table 18: Forecast tax asset base for AA6 (\$ million nominal)

	2025	2026	2027	2028	2029
Opening tax asset base	673.3	711.4	759.0	785.7	806.6
Capital expenditure	106.5	122.6	108.7	106.1	106.7
Tax depreciation	68.4	74.9	82.0	85.2	87.1
Asset disposals	-	-	-	-	-
Closing value	711.4	759.0	785.7	806.6	826.3

Source: ERA, Final Decision Attachment 7, GDS Tariff Model, December 2024.

Statutory income tax rate

The expected statutory income tax (r_t) for each regulatory year of the access arrangement period is 30 per cent.

Imputation credits

As required by the gas rate of return guidelines, a value of 0.5 is used for the value of imputation credits (γ).⁶

⁶ The gas rate of return guidelines became a binding instrument in Western Australia in April 2019.

Efficiency Gains and/or Losses – NGR 72(1)(i)

There was no incentive mechanism that operated in the previous (earlier) access arrangement period.

Approach to Setting Tariffs – NGR 72(1)(j)

Rule 94 of the NGR sets out the requirements for determining reference tariffs for distribution pipelines.

Tariff classes

Services provided by means of the GDS include reference services and non-reference services. Non-reference services do not form part of the access arrangement for the GDS and as such the service provider will continue to negotiate the price for non-reference services directly with the prospective user.

Reference services are grouped into haulage reference services and ancillary reference services:

- Haulage reference services are primarily the transportation of gas from the transmission pipeline to the customer; and include the installation and maintenance of a standard meter, meter reading and associated data collection and reporting.
- Ancillary reference services are services that are ancillary to haulage services and include:
 - deregistering a delivery point
 - applying a meter lock
 - removing a meter lock
 - disconnecting a delivery point
 - reconnecting a delivery point
 - special meter reading.

Haulage reference services are grouped into five separate services with associated tariff classes and include the A1 Service, A2 Service, B1 Service, B2 Service and B3 Service. The characteristics for each tariff class are detailed in Table 19.

For ancillary reference services, there is a single tariff class for each service. The characteristics for each ancillary reference tariff class are set out in of the revised access arrangement for the GDS.

Table 19: Tariff classes for haulage reference services for AA6

Tariff Class	Characteristics
A1	<ul style="list-style-type: none"> • A pipeline service where a user may take delivery of gas at a delivery point on the GDS. • Preconditions of the service: <ul style="list-style-type: none"> – The prospective user submits an application and at that time: <ul style="list-style-type: none"> – It is reasonably anticipated that the prospective user will take delivery of 35 terajoules or more of gas during each year of the haulage contract; and – The prospective user requests a contracted peak rate of 10 gigajoules or more per hour; and – The prospective user requests user specific delivery facilities. • The reference tariff is Tariff A1.
A2	<ul style="list-style-type: none"> • A pipeline service where a user may take delivery of gas at a delivery point on the GDS. • Preconditions of the service: <ul style="list-style-type: none"> – The prospective user submits an application and at that time: <ul style="list-style-type: none"> – It is reasonably anticipated that the prospective user will take delivery of 10 terajoules or more of gas, but less than 35 terajoules of gas, during each year of the haulage contract; or – The prospective user requests a contracted peak rate of less than 10 gigajoules per hour; or – An above 10 TJ Determination has been, or is likely to be made, under the Retail Market Procedures; and – The prospective user requests user specific delivery facilities. • The reference tariff is Tariff A2.
B1	<ul style="list-style-type: none"> • A pipeline service where a user may take delivery of gas at a delivery point on the GDS. • Preconditions of this service: <ul style="list-style-type: none"> – The prospective user submits an application and at that time either (or both): <ul style="list-style-type: none"> – It is reasonably anticipated that the prospective user will take delivery of less than 10 terajoules of gas during each year of the haulage contract; or – The prospective user requests a contracted peak rate of less than 10 gigajoules per hour; and – The prospective user requests user specific delivery facilities; or – The prospective user takes delivery of gas at a delivery point on the medium pressure/low pressure system using standard delivery facilities, which include a standard 18m³/h meter or a standard meter with a badged capacity of more than 18m³/h. • The reference tariff is Tariff B1.
B2	<ul style="list-style-type: none"> • A pipeline service where a user may take delivery of gas at a delivery point on the medium pressure/low pressure system using standard delivery facilities, which include a standard with a badged capacity of greater than or equal to 12m³/h and less than 18m³/h. • The reference tariff is Tariff B2.

Tariff Class	Characteristics
B3	<ul style="list-style-type: none"> A pipeline service where a user may take delivery of gas at a delivery point on the medium pressure/low pressure system using standard delivery facilities, which include a standard with a badged capacity of less than 12m³/h. The reference tariff is Tariff B3.

Charging parameters

The tariff structure for haulage and ancillary reference services are as follows:

- Tariffs for haulage reference services include a fixed charge and a declining block usage charge component.
- Tariffs for ancillary reference services are charged at the same rate to all customers within the tariff class, or at a rate reflecting the costs of the individual service that is provided.

Table 20 and Table 21 show the tariff structures (charging parameters) for haulage and ancillary reference services, respectively.

Table 20: Tariff structures (charging parameters) for haulage reference services for AA6

Tariff Class	Service Element	Charging Parameter
A1	Fixed charge for using the distribution system	Standing Charge (\$/year)
	Fixed charge for the capacity of network utilised	Demand Charge (\$/MHQ GJ/km)
	Variable charge based on throughput and haulage distance	Usage Charge (\$/GJ/km)
	Charge to reflect the specific costs associated with the customer for service pipe, regulators, metering, and telemetry	User specific Charge (\$)
A2	Fixed charge for using the distribution system	Standing Charge (\$/year)
	Variable charge based on throughput	Usage Charge (\$/GJ)
	Charge to reflect the specific costs associated with the customer for service pipe, regulators, metering, and telemetry	User specific Charge (\$)
B1	Fixed charge for using the distribution system	Standing Charge (\$/year)
	Variable charge based on throughput	Usage Charge (\$/GJ) with two blocks
	Charge to reflect the specific costs associated with the customer for service pipe, regulators, metering, and telemetry	User specific Charge (\$)

Tariff Class	Service Element	Charging Parameter
B2	Fixed charge for using the distribution system	Standing Charge (\$/year)
	Variable charge based on throughput	Usage Charge (\$/GJ) with two blocks
B3	Fixed charge for using the distribution system	Standing Charge (\$/year)
	Variable charge based on throughput	Usage Charge (\$/GJ) with three blocks

Table 21: Tariff structures (charging parameters) for ancillary reference services for AA6

Ancillary Service	Charging Parameter
Deregistering a delivery point	Published tariff per activity, plus the reasonable cost to the service provider to deregister the delivery point
Applying a meter lock	Published tariff per activity
Removing a meter lock	Published tariff per activity
Disconnecting a delivery point	Published tariff per activity
Reconnecting a delivery point	Published tariff per activity
Special meter reading	Published tariff per activity

Reference tariffs and costs

Table 22 and Table 23 show the tariffs for haulage and ancillary reference services, respectively for the access arrangement period.

Table 22: Haulage reference service tariffs for AA6 (\$ real as at 31 December 2023) – indicative only

Charging parameter	Unit	2025	2026	2027	2028	2029
A1 tariff						
Standing charge	\$/year	42,296.64	45,611.33	49,185.78	53,040.35	57,197.00
Demand charges						
First 10 km	\$/GJ km	178.28	192.25	207.32	223.57	241.09
Distance > 10 km	\$/GJ km	93.84	101.19	109.12	117.67	126.89
Usage Charges						
First 10 km	\$/GJ km	0.03771	0.04067	0.04386	0.04730	0.05101
Distance > 10 km	\$/GJ km	0.01900	0.02049	0.02210	0.02383	0.02570

Charging parameter	Unit	2025	2026	2027	2028	2029
A2 tariff						
Standing charge	\$/year	23,391.62	25,224.77	27,201.58	29,333.30	31,632.08
First 10 TJ	\$/GJ	2.28	2.46	2.65	2.86	3.08
Volume > 10 TJ	\$/GJ	1.21	1.30	1.40	1.51	1.63
B1 tariff						
Standing charge	\$/year	1,183.25	1,275.98	1,375.98	1,483.81	1,600.09
First 5 TJ	\$/GJ	4.50	4.85	5.23	5.64	6.08
Volume > 5 TJ	\$/GJ	3.86	4.16	4.49	4.84	5.22
B2 tariff						
Standing charge	\$/year	296.94	320.21	345.30	372.36	401.54
First 100 GJ	\$/GJ	7.52	8.11	8.75	9.44	10.18
Volume > 100 GJ	\$/GJ	4.49	4.84	5.22	5.63	6.07
B3 tariff						
Standing charge	\$/year	146.91	158.42	170.83	184.22	198.66
Volume < 9.855 GJ	\$/GJ	5.09	5.49	5.92	6.38	6.88
Volume > 9.855 GJ	\$/GJ	5.09	5.49	5.92	6.38	6.88

Source: ERA, Final Decision Attachment 3, GDS Tariff Model, November 2024.

Table 23: Ancillary reference service tariffs for AA6 (\$ real as at 31 December 2023)

Ancillary service	2025	2026	2027	2028	2029
Applying a meter lock	40.75	40.75	40.75	40.75	40.75
Removing a meter lock	27.78	27.78	27.78	27.78	27.78
Deregistering a delivery point	151.34	151.34	151.34	151.34	151.34
Disconnecting a delivery point	94.29	94.29	94.29	94.29	94.29
Reconnecting a delivery point	200.27	200.27	200.27	200.27	200.27
Permanent disconnection	1,010.91	1,010.91	1,010.91	1,010.91	1,010.91
Special meter reading	9.76	9.76	9.76	9.76	9.76

Source: ERA, Final Decision Attachment 3, GDS Tariff Model, November 2024.

Stand-alone and incremental tariff considerations

Rule 94(3) of the NGR requires that, for each tariff class, the expected revenue to be recovered from tariffs should lie on or between:

- an upper bound, representing the standalone cost of providing the reference service to customers in that class; and
- a lower bound, representing the avoidable cost of not providing the reference service to those customers.

As required by rule 94(3), Table 24 shows that the expected revenue to be recovered from the reference tariffs for each tariff class is between the *lower bound* of the *avoidable cost* of not providing the reference service and the *upper bound* of the *standalone cost* of providing the reference service. The reference tariffs for ancillary reference services are set to recover the cost of ancillary services.

Table 24: Haulage reference service revenue for AA6 – compliance with NGR 94(3)
(\$ million present value)

Tariff class	Avoidable costs	Expected revenue	Standalone costs
A1	3.1	44.6	294.1
A2	0.7	33.8	431.6
B1	10.4	74.5	636.2
B2	9.1	69.1	644.2
B3	168.6	1,014.1	1,206.7

Source: ERA, Final Decision Attachment 3, GDS Tariff Model, November 2024.

Reference Tariff Variation Mechanism – NGR 72(1)(k)

Rule 92 of the NGR requires the access arrangement for the GDS to include a reference tariff variation mechanism, which must be designed to equalise (in terms of present values) the forecast revenue from reference services over the access arrangement period and the portion of total revenue allocated to reference services for the access arrangement period.

Rule 97 of the NGR specifies the requirements (or mechanisms) for reference tariff variations.

Annexure B of the revised access arrangement for the GDS sets out the tariff variation mechanism that the service provider will use to vary the haulage reference tariffs. The mechanism provides for the variation of tariffs in accordance with a formula and includes cost pass through events.

Annexure C of the revised access arrangement for the GDS sets out the tariff variation mechanism that the service provider will use to vary the ancillary reference tariffs. The mechanism provides for the variation of tariffs by the movement in the Consumer Price Index (CPI).⁷

Tariff variation by formula

Tariff variations by formula places a constraint on the overall movement in haulage reference services tariffs from one year to the next (referred to as a *weighted average price cap* or *tariff basket*). This type of variation:

- Allows average prices to increase by the annual change in CPI, plus or minus an X-factor that is varied for debt risk premium updates and cost pass through events.
- Provides an incentive for the service provider to increase customer connections and usage to generate additional revenue, which can benefit customers in future access arrangement periods with costs being spread over a larger customer base.

Tariff variation by cost pass through

Tariff variations by cost pass through allows the costs of “cost pass through events” to be recovered through tariffs. The following are cost pass through events for the access arrangement period:

- Incurring higher heating value (HHV) costs that constitute conforming capital expenditure or conforming operating expenditure.
- Incurring physical gate point costs that constitute conforming capital or conforming operating expenditure.
- Incurring conforming capital expenditure or conforming operating expenditure as a result of a change in law or tax change.
- Incurring conforming capital expenditure or conforming operating expenditure as a direct result of any law that imposes a fee or tax on greenhouse gas emissions or concentrations.

⁷ Weighted average of eight capital cities, as published by the Australian Bureau of Statistics.

Proposed Incentive Mechanism – NGR 72(1)(I)

There is no proposed incentive mechanism for the access arrangement period.

Total Revenue – NGR 72(1)(m)

Total revenue has been determined using the “building block approach” in accordance with rule 76 of the NGR.

The building blocks of total revenue for each year of the access arrangement period is shown in Table 25.

There was no incentive mechanism that operated in the earlier access arrangement period and there is no proposed incentive mechanism for the access arrangement period. Hence, there are no increments or decrements that affect total revenue.

Table 25: Total revenue building blocks for AA6 (\$ million nominal)

Building blocks	2025	2026	2027	2028	2029	Total
Regulatory operating expenditure	85.29	91.43	96.25	103.19	105.07	481.23
<i>Operating expenditure</i>	83.68	89.13	93.69	100.43	102.18	469.11
<i>Return on working capital</i>	1.61	2.30	2.56	2.76	2.89	12.12
Return on capital base	113.17	118.19	123.42	127.29	130.82	612.89
Regulatory depreciation	34.73	47.73	53.40	55.61	57.00	248.47
<i>Depreciation</i>	70.97	85.58	92.93	96.37	98.89	444.74
<i>Inflationary gain</i>	(36.24)	(37.85)	(39.53)	(40.76)	(41.90)	(196.27)
Regulatory corporate income tax	4.77	6.46	6.72	6.92	7.18	32.04
<i>Corporate income tax</i>	9.54	12.92	13.43	13.84	14.36	64.08
<i>Imputation credits</i>	(4.77)	(6.46)	(6.72)	(6.92)	(7.18)	(32.04)
Total revenue	237.96	263.81	279.79	293.00	300.07	1,374.63

Source: ERA, Final Decision Attachment 3, GDS Tariff Model, November 2024.

Working capital

The NGL and NGR do not make specific reference to the cost of working capital used by a service provider. While not a specific building block, consideration has been given to the cost of working capital in determining total revenue for the access arrangement period.

Working capital refers to a stock of funds that must be maintained by the service provider to pay costs as they fall due. In circumstances where it is the norm for the costs of providing services to be incurred before the revenues from the provision of services are received, a stock of working capital (that is, the required return on the capital investment) is a cost to the service provider of operating its business and providing services.

Table 26 shows the calculation of the return on working capital used in the total revenue building blocks above (Table 25).

Table 26: Return on working capital for AA6 (\$ million nominal)

Working Capital Parameter	2025	2026	2027	2028	2029
Receivables	40.40	44.80	47.50	49.60	51.00
Inventory	2.40	2.80	2.50	2.40	2.40
Creditors	(9.90)	(11.00)	(10.50)	(10.70)	(10.90)
End of year working capital	32.90	36.60	39.40	41.30	42.50
Working capital opening value					
Working capital opening value	23.00	32.90	36.60	39.40	41.30
Variation	9.90	3.60	2.90	1.90	1.20
Working capital closing value	32.90	36.60	39.40	41.30	42.50
Return on working capital					
Opening working capital	23.00	32.90	36.60	39.40	41.30
WACC % (nominal)	6.99	6.99	6.99	6.99	6.99
Return on working capital	1.60	2.30	2.60	2.80	2.90

Source: ERA, Final Decision, GDS Tariff Model, November 2024.

Allocation of total revenue

Rule 93(2) of the NGR requires total revenue to be allocated between reference services and other services on an allocation of cost basis.

The NGR further allows some services, other than reference services, to be classified as rebateable services, with part of the revenue from the sale of these services to be rebated or refunded to users of reference services. Rule 93(4) of the NGR states that “a pipeline service is a rebateable service if the service is not a reference service; and substantial uncertainty exists concerning the extent of the demand for the service or of the revenue to be generated from the service; and the market for the service is substantially different from the market for any reference service”. There are no rebateable services for the access arrangement period.

Total revenue will be recovered from haulage reference services, ancillary reference services and from customers receiving prudent discounts.

Prudent discounts are offered to some customers in circumstances where the discount is necessary because of competition from other energy sources and the loss of the customer would lead to higher tariffs for existing customers. Rule 96 of the NGR sets out the requirements for prudent discounts. There are no prudent discounts being offered under the access arrangement for this access arrangement period.

Table 27 (below) shows the allocation of total revenue for the access arrangement period.

Table 27: Total revenue allocation between reference services and other services for AA6 (\$ million nominal)

	2025	2026	2027	2028	2029	Total
Haulage reference services	215.6	240.3	268.1	298.9	333.6	1,356.5
Ancillary reference services	5.1	5.3	5.5	5.7	6.0	27.6
Customers receiving prudent discounts	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue	220.7	245.6	273.6	304.6	339.6	1,384.1

Source: ERA, Final Decision Attachment 3, GDS Tariff Model.

Appendix 1 List of Tables

Table 1:	Requirements for access arrangement information relevant to price and revenue regulation	2
Table 2:	Actual and forecast consumer price index and inflation rates	4
Table 3:	Capital expenditure by asset class for AA5 (\$ million real as at 31 December 2023).....	5
Table 4:	Operating expenditure by category for AA5 (\$ million real as at 31 December 2023).....	5
Table 5:	Minimum, maximum and average demand for AA5 (TJ / day)	6
Table 6:	Average customer numbers by tariff class for AA5 (average for year)	6
Table 7:	Opening capital base at 1 January 2025 (\$ million real as at 31 December 2023).....	8
Table 8:	Projected capital base for AA6 (\$ million nominal).....	9
Table 9:	Capital expenditure by asset class for AA6 (\$ million real as at 31 December 2023).....	10
Table 10:	Forecast of depreciation for AA6 (\$ million real as at 31 December 2023).....	11
Table 11:	AA6 asset lives	12
Table 12:	Demand forecast for haulage reference services for AA6	13
Table 13:	Demand forecast for ancillary reference services for AA6	14
Table 14:	Forecast operating expenditure for AA6 by category (\$ million real as at 31 December 2023).....	15
Table 15:	Rate of return parameters for AA6	16
Table 16:	Estimated cost of corporate income tax for AA6 (\$ million nominal).....	17
Table 17:	Tax asset categories and tax lives for AA6	18
Table 18:	Forecast tax asset base for AA6 (\$ million nominal)	19
Table 19:	Tariff classes for haulage reference services for AA6.....	22
Table 20:	Tariff structures (charging parameters) for haulage reference services for AA6	23
Table 21:	Tariff structures (charging parameters) for ancillary reference services for AA6	24
Table 22:	Haulage reference service tariffs for AA6 (\$ real as at 31 December 2023) – indicative only	24
Table 23:	Ancillary reference service tariffs for AA6 (\$ real as at 31 December 2023)	25
Table 24:	Haulage reference service revenue for AA6 – compliance with NGR 94(3) (\$ million present value)	26
Table 25:	Total revenue building blocks for AA6 (\$ million nominal)	29
Table 26:	Return on working capital for AA6 (\$ million nominal).....	30
Table 27:	Total revenue allocation between reference services and other services for AA6 (\$ million nominal).....	31

Appendix 2 Abbreviations

AA5	Fifth Access Arrangement Period (1 January 2020 to 31 December 2024)
AA6	Sixth Access Arrangement Period (1 January 2025 to 31 December 2029)
AAI	Access Arrangement Information
AEMC	Australian Energy Market Commission
ATCO	ATCO Gas Australia
CPI	Consumer Price Index
GDS	Gas Distribution Systems
NGR	National Gas Rules
WACC	Weighted Average Cost of Capital